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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,805	02/10/2004	Robert Kaylor	22768.24	9690
27683	7590	06/02/2005	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			MULLEN, THOMAS J	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/775,805	Applicant(s) KAYLOR ET AL.	
	Examiner Thomas J. Mullen, Jr.	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-25 is/are allowed.
- 6) ☒ Claim(s) 1,8,9,15 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-7,10-14,16,17,19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2632

1. Claims 3, 9, 12-14 and 18-19 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, line 2, a space should appear before both occurrences of "Mhz".

A period should be added at the end of claim 9.

The semi-colon should be a period at the end of claim 12.

Claim 13, line 2, a space should appear before both occurrences of "kHz".

Claims 18 and 19, "the active AC power line" lacks clear antecedent basis.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites that the "first AC line interface" (150 in Fig. 2) comprises, in part, "surge protection circuitry" (145 in Fig. 2). However, as shown in Fig. 2 the AC line interface 150 and surge protection circuitry 145 are distinct elements. Thus, the context in which the AC line interface 150 is considered to "comprise" surge protection circuitry 145 is unclear.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 8-9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansfield et al (US 6441723) in view of Darbee et al (US 4959810).

Art Unit: 2632

Note in Mansfield (Fig. 2), powerline communication system 20 comprising control panel 24; power line 28; various appliances (26,32,34,40); and various control "modules" (22,30,34,44) for coupling the various components (control panel and appliances) to the power line. The various appliance "modules" (22,30,34) are described as "electrical control devices" for controlling the various appliances, while control panel "module" 44 sends control signals to the other modules (22,30,34) over the power line 28; each of the "modules" includes a "low data bandwidth power line transceiver" shown in Figs. 1A-1B (see col. 5, lines 23-40 and col. 6, lines 46-49). The transceiver of Figs. 1A-1B includes various transmitter components (see col. 3, line 51 to col. 4, line 2, and col. 4, line 57 to col. 5, line 12), and various receiver components (see col. 4, lines 3-28). The transmitter components include a capacitor C3 for "filter(ing)" an originating signal, and "output transistors (Q1 and Q6, which) operate in Class C", i.e. a means of amplifying the signal (see col. 3, lines 51-60). The receiver components include a "band-pass filter" and amplifiers (U2, Q3) (see col. 4, lines 3-11). Appliance module 22 can include "an infrared transceiver for communication to TVs, VCRs, stereophonic or other remote controlled equipment" (col. 6, lines 1-4). Further, Mansfield discloses a "Digital Jukebox" embodiment (Fig. 9 and cols. 22-25), wherein electronic components in various rooms of a dwelling may be "operate(d) from a simple hand-held IR remote control" (col. 22, last line; note the "2-Way IR Remote" depicted in 3 of the "rooms" in Fig. 9), and wherein "modules" associated with audio speakers in each room include an "IR sensor" and provide "IR remote control communication" for enabling a user to "select and play music from any room in the house" (col. 23, lines 58-67).

Thus, as to claims 1, 8 and 15, Mansfield teaches in one embodiment, transmitting an IR signal from the hand-held remote (of Fig. 9); receiving the IR signal at the IR sensor of the "Speaker Module" which is in the same "room" as the handheld remote; "substituting" a corresponding RF signal for the IR signal (note the RF frequencies discussed at col. 5, lines 27-29), and "filtering and amplifying" the RF signal via the filtering and amplifying components of the transmitter portion of the "transceiver" discussed above (Figs. 1A-1B); transmitting the corresponding RF signal over powerline 28; receiving the RF signal at the corresponding "Speaker Modules" in other rooms; "filtering and amplifying" the received RF signal via the filtering and amplifying components of the receiver portion of the "transceiver" discussed above (Figs. 1A-1B); "converting" the RF signal to an IR signal (to provide the "IR remote control

Art Unit: 2632

communication" discussed above); and transmitting the IR signal to the appropriate electronic component (i.e. audio speakers in the other rooms).

Mansfield fails to explicitly teach that the IR signals and/or the RF powerline signal are "bit streams" per se; however, one skilled in the art of handheld remotes would have recognized that different remote control input signals need to be readily distinguishable from each other at the receiving (i.e. controlled) electronic component(s) so as to provide appropriate control of a particular component, and also that it is often desirable (e.g. with household electronics appliances) to be able to remotely control multiple electronic components--each having a multitude of different functions--from a single device; for example, Darbee teaches a "universal" remote control device using bit stream-type signals (see e.g. Figs. 11-13) for controlling functions in multiple electronic components. Therefore, in view of Darbee it would have been obvious to make the remote control signals of Mansfield in the form of "bit streams" in order to maximize the number of different controllable signals usable in the system, and to make such signals as clearly distinguishable from each other as possible.

Regarding claim 9, Mansfield further teaches that in the transceiver of Figs. 1A-1B, the receiver's "band-pass filter" removes "out-of-band signals" and "ambient noise" (col. 4, lines 8-10), which inherently includes rejecting the AC voltage frequency signals.

6. Claims 21-25 are allowed. Claims 2-7, 10-14 and 16-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and/or objections under 37 CFR 1.75(a), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Binder (US 6842459), Abraham (US 5818127) and Tsai (US 5161021) are cited to further show the state of the art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 571-272-2965.

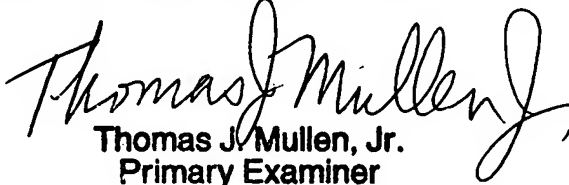
Art Unit: 2632

The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

TJM


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632